Data Validation Checklist Semivolatile Organic Analyses

Project:	35 TH Avenue Superfund Site	Project No: 152	.68508.20000
Laboratory:	TestAmerica - Savannah, GA ¹	Job ID.: <u>680</u>	D-87545-1
Method:	SW-846 8270C Low-Level (PAH)	Associated Samples:	Refer to Attachment A (Sample Summary)
Matrix:	Soil	Samples Collected:	02/14/2013
Reviewer:	Karen Marie Trujillo	Date:	03/07/2013
Concurrence ² :	Nicole Lancaster	Date:	03/27/2013

	Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1.	Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2.	Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3.	Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		√			
4.	Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		√			
5.	Were holding times met (\leq 7 and 14 days from collection to extraction for aqueous and solid samples, respectively; \leq 40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	√				
6.	Were results for all project-specified target analytes reported?	✓				
7.	Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8.	Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.		√			
9.	Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10.	Were target analytes detected in the method blank?		✓			
	Were target analytes detected in equipment/rinsate blanks?		√		PAHs were not detected during the analysis of rinsate blank 021213-RB-Shovel (680-87747-31).	

 $^{^1}$ All analytical work subcontracted to TestAmerica of Tampa, FL 2 Independent technical reviewer URS Group, Inc. Page 1 of 5

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample no, note in DV report.	e? If	√		According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank, 021213-RB-Shovel (680-87747-31) was collected during the week of 02/11/13. The rinsate blank was analyzed for PAHs under Test America Job ID 680-87747-2.	Ü
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sampl results <5x associated blank concentration (10x for comn blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	√			FM0161H-CSD (680-87545-7) is a field duplicate of FM0161H-CS (680-87545-6)	
15. Was precision deemed acceptable as defined by the project plans?	et	√		Refer to Attachment B (Field Duplicate Evaluation)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW 8270C) met? If no, professional judgment may be applie determine to what extent the data may be utilized.				Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP turno, professional judgment may be applied to determine to extent the data may be utilized.					
 18. Were initial and continuing calibration standards analyzed the proper frequency for each instrument? Ensure that a minimum of five standards are used for initial calibration. If no, use professional judgment to determine the effect on the data and note in the review narrative. An initial calibration is to be associated with each sar analysis. A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	the ower			 Instrument ID: BSMA5973 Initial Calibration: 02/22/2013 ICV: 02/22/13 @ 12:48 Instrument ID: BSMC5973 Initial Calibration: 02/22/2013 ICV: 02/22/13 @ 14:06 	
19. Were calibration results within laboratory/project specifications? • ICAL (Criteria: ≤15 mean %RSD with individual CC %RSD ≤30 (≤50% for poor performers), OR r≥0.995		√		• ICV of 02/22/13 @ 12:48, instrument BSMA5973: 2-Methylnaphthalene @ 22.1 %D (Lab: ≤35, Project: ≤20). Positive bias is indicated by the CCV percent difference; therefore, J-flag detected results in associated samples ³ .	J

³ 680-87545-2 through 9 URS Group, Inc. Page 2 of 5

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
r²≥0.99, and RRF ≥0.050 (≥0.010 for poor performers)): o If %RSD>15 (>50% for poor performers), or r <0.995, or r² <0.995, then J-flag positive results and UJ-flag non-detects o If mean RRF <0.050 (<0.010 for poor performers), then J-flag positive results and R-flag non-detects • ICV and CCV (Criteria: ≤20%D (≤50% for poor performers) and RF ≥0.050 (≥0.010 for poor performers)): o If %D>20 (>50% for poor performers), then J-flag positive results and UJ-flag non-detects o If RF <0.050 (<0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds				ICV of 02/22/13 @ 14:06, instrument BSMC5973: ○ Chrysene @ -20.6 %D (Lab: ≤35, Project: ≤20) ○ Benzo[a]pyrene @-21.7 %D (Lab: ≤35, Project: ≤20). Positive bias is indicated by the CCV percent difference; therefore, J-flag detected results in associated samples⁴.	
20. Was a LCS prepared for each batch and matrix?	✓				
 21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R >Upper Control Limit (UCL) and J/R-flag results when %R <lower (lcl).<="" control="" li="" limit=""> 22. Were LCS/LCSD RPD within lab specifications? If no, J-flag </lower>	√		√	LCS Only	
positive results and UJ-flag non-detects 23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	√			 Prep Batch 134712: 680-87545-1 (CV0240A-CS), MS/MSD Prep Batch 134699: 680-87496-61 (Batch sample), MS/MSD 	
 25. Were MS/MSD recoveries within laboratory/project specifications? Only QC results for project samples that are reported under this Job ID are evaluated. If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If either MS or MSD recovery meets control limits, qualification of data is not warranted. MS and MSD %R<10: J and R Flag positive and ND results, respectively MS and MSD %R >10 and <lcl: and="" j-flag="" li="" non-detect="" positive="" results<="" uj-flag=""> </lcl:>		✓		 CV0240A-CS (680-87545-1): Benzo[a]anthracene @ 140 and 99 %R (40-130). Qualification of data not required⁵. Benzo[b]fluoranthene @ 156 and 89 %R (37-130). Qualification of data not required⁵. Fluoranthene @ 195 and 89 %R (40-130). Qualification of data not required⁵. Pyrene @ 182 and 92 %R (44-130). Qualification of data not required⁵. 	

 ⁴ 680-87545-1 and 10 through 20
 ⁵ The recovery of either the MS or MSD met control limits. URS Group, Inc. Page 3 of 5

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
MS and MSD R% >UCL (or 140): J-Flag positive results					
 26. Were laboratory criteria met for precision during the MS/MSD analysis? Only QC results for project samples that are reported under this Job ID are evaluated. If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. If %RPD > UCL, J-flag positive result and UJ-flag non-detect result 	V				
 Were surrogate recoveries within lab/project specifications? If %R for 1 Acid or BN surrogates <10, then J-flag positive and R-flag non-detect associated sample results If 2 or more Acid or BN %R >UCL, then J-flag positive results If 2 or more Acid or BN %R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> If 2 or more Acid or BN, with 1 %R >UCL and 1 %R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> </lcl,></lcl,>	✓				
 28. Were internal standard (IS) results within lab/project specifications? If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met. 	\				

Job ID.: 680-87545-1

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
29. Were lab comments included in report?	\			Refer to Attachment C (Case Narrative)	

Comments: The data validation was conducted in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012). The data review process was modeled after the USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review (EPA, October 1999) and USEPA CLP NFG for Low Concentration Organic Methods Data Review (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment D). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.

DV Flag Definitions:

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- R The sample results are unusable. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A SAMPLE SUMMARY

Sample Summary

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87545-1

SDG: 68087545-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87545-1	CV0240A-CS	Solid	02/14/13 08:46	02/16/13 09:03
680-87545-2	CV0240B-CS	Solid	02/14/13 08:58	02/16/13 09:03
680-87545-3	FM0161E-CS	Solid	02/14/13 08:39	02/16/13 09:03
680-87545-4	FM0161F-CS	Solid	02/14/13 08:47	02/16/13 09:03
680-87545-5	FM0161G-CS	Solid	02/14/13 08:58	02/16/13 09:03
680-87545-6	FM0161H-CS	Solid	02/14/13 09:05	02/16/13 09:03
680-87545-7	FM0161H-CSD	Solid	02/14/13 09:08	02/16/13 09:03
680-87545-8	FM0161I-CS	Solid	02/14/13 09:10	02/16/13 09:03
680-87545-9	FM0161AD-GS	Solid	02/14/13 08:49	02/16/13 09:03
680-87545-10	FM0161AE-GS	Solid	02/14/13 08:52	02/16/13 09:03
680-87545-11	FM0161AF-GS	Solid	02/14/13 08:58	02/16/13 09:03
880-87545-12	FM0161AG-GS	Solid	02/14/13 09:41	02/16/13 09:03
680-87545-13	FM0161AH-GS	Solid	02/14/13 09:43	02/16/13 09:03
680-87545-14	FM0161AI-GS	Solid	02/14/13 09:52	02/16/13 09:03
680-87545-15	FM0161AJ-GS	Solid	02/14/13 10:04	02/16/13 09:03
680-87545-16	FM0161AK-GS	Solid	02/14/13 10:37	02/16/13 09:03
680-87545-17	FM0161AL-GS	Solid	02/14/13 10:52	02/16/13 09:03
80-87545-18	FM0161AM-GS	Solid	02/14/13 10:53	02/16/13 09:03
80-87545-19	FM0161J-CS	Solid	02/14/13 09:31	02/16/13 09:03
880-87545-20	FM0161K-CS	Solid	02/14/13 09:37	02/16/13 09:03

ATTACHMENT B FIELD DUPLICATE EVALUATION

Analyte	FM0161H-CS 680-87545-6		RL	FM0161H-CSD 680-87545-7		RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Acenaphthylene	10	J	41	34	J	56	μg/kg	242.5	NA	24	97	None, absolute difference ≤ 2x Avg RL
Anthracene	18		8.7	86		12	μg/kg	51.75	NA	68	20.7	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(a)anthracene	61		8.3	220		11	μg/kg	48.25	113	NA	NA	J/UJ-flag, RPD > 50%
Benzo(a)pyrene	40		11	140		14	μg/kg	62.5	NA	100	25	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(b)fluoranthene	68		13	210		17	μg/kg	75	NA	142	30	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(g,h,i)perylene	36		21	94		28	μg/kg	122.5	NA	58	49	J/UJ-flag, absolute difference > 2x Avg RL
Benzo(k)fluoranthene	23		8.3	99		11	μg/kg	48.25	NA	76	19.3	J/UJ-flag, absolute difference > 2x Avg RL
Chrysene	70		9.3	230		13	μg/kg	55.75	107	NA	NA	J/UJ-flag, RPD > 50%
Dibenzo(a,h)anthracene	15	J	21	43		28	μg/kg	122.5	NA	28	49	None, absolute difference $\leq 2x$ Avg RL
Fluoranthene	67		21	340		28	μg/kg	122.5	NA	273	49	J/UJ-flag, absolute difference > 2x Avg RL
Fluorene			21	27	J	28	μg/kg	122.5	NA	27	49	None, absolute difference $\leq 2x$ Avg RL
Indeno(1,2,3-cd)pyrene	29		21	100		28	μg/kg	122.5	NA	71	49	J/UJ-flag, absolute difference > 2x Avg RL
1-Methylnaphthalene	15	J	41	40	J	56	μg/kg	242.5	NA	25	97	None, absolute difference $\leq 2x$ Avg RL
2-Methylnaphthalene	21	J	41	55	J	56	μg/kg	242.5	NA	34	97	None, absolute difference $\leq 2x$ Avg RL
Naphthalene	23	J	41	62		56	μg/kg	242.5	NA	39	97	None, absolute difference ≤ 2x Avg RL
Phenanthrene	45		8.3	310		11	μg/kg	48.25	NA	265	19.3	J/UJ-flag, absolute difference > 2x Avg RL
Pyrene	66		21	270		28	μg/kg	122.5	NA	204	49	J/UJ-flag, absolute difference > 2x Avg RL

Note: If the analyte was not detected, then the cell was left blank.

μg/kg - micrograms per kilogram

J - Estimated vlaue

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

UJ - Not detected and the limit is estimated

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C
CASE NARRATIVE

Case Narrative

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87545-1

SDG: 68087545-1

Job ID: 680-87545-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-87545-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

The samples were received on 02/16/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.8° C and 3.4° C.

SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples CV0240A-CS (680-87545-1), CV0240B-CS (680-87545-2), FM0161E-CS (680-87545-3), FM0161F-CS (680-87545-4), FM0161G-CS (680-87545-5), FM0161H-CS (680-87545-6), FM0161H-CSD (680-87545-7), FM0161I-CS (680-87545-8), FM0161AD-GS (680-87545-9), FM0161AE-GS (680-87545-10), FM0161AF-GS (680-87545-11), FM0161AG-GS (680-87545-12), FM0161AH-GS (680-87545-13), FM0161AI-GS (680-87545-14), FM0161AJ-GS (680-87545-15), FM0161AK-GS (680-87545-16), FM0161AL-GS (680-87545-17), FM0161AM-GS (680-87545-18), FM0161J-CS (680-87545-19) and FM0161K-CS (680-87545-20) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/21/2013 and analyzed on 02/22/2013.

Samples CV0240A-CS (680-87545-1)[4X] and CV0240B-CS (680-87545-2)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Benzo[a]pyrene recovered outside the recovery criteria for the MS of sample 680-87496-61 in batch 660-134771.

Benzo[a]anthracene, Benzo[b]fluoranthene, Fluoranthene and Pyrene recovered outside the recovery criteria for the MS of sample CV0240A-CS (680-87545-1) in batch 660-134776.

No other difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All other quality control parameters were within the acceptance limits.

ATTACHMENT D QUALIFIED SAMPLE RESULTS

Client: Oneida Total Integrated Enterprises LLC TestAmerica Job ID: 680-87545-1 Project/Site: 35th Avenue Superfund Site SDG: 68087545-1

Client Sample ID: CV0240A-CS Lab Sample ID: 680-87545-1

Date Collected: 02/14/13 08:46 **Matrix: Solid** Date Received: 02/16/13 09:03 Percent Solids: 90.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	430	U	430	86	ug/Kg	*	02/21/13 12:14	02/22/13 15:03	4
Acenaphthylene	90	J	170	21	ug/Kg	₩	02/21/13 12:14	02/22/13 15:03	4
Anthracene	140		36	18	ug/Kg	☼	02/21/13 12:14	02/22/13 15:03	4
Benzo[a]anthracene	740	*	34	17	ug/Kg	₩	02/21/13 12:14	02/22/13 15:03	4
Benzo[a]pyrene	740	J	45	22	ug/Kg	₽	02/21/13 12:14	02/22/13 15:03	4
Benzo[b]fluoranthene	1200	F	52	26	ug/Kg	₩	02/21/13 12:14	02/22/13 15:03	4
Benzo[g,h,i]perylene	580		86	19	ug/Kg	\$	02/21/13 12:14	02/22/13 15:03	4
Benzo[k]fluoranthene	450		34	15	ug/Kg	☼	02/21/13 12:14	02/22/13 15:03	4
Chrysene	890	J	39	19	ug/Kg	₩	02/21/13 12:14	02/22/13 15:03	4
Dibenz(a,h)anthracene	150		86	18	ug/Kg	₽	02/21/13 12:14	02/22/13 15:03	4
Fluoranthene	1600	/	86	17	ug/Kg	₩	02/21/13 12:14	02/22/13 15:03	4
luorene	35	J	86	18	ug/Kg	₩	02/21/13 12:14	02/22/13 15:03	4
ndeno[1,2,3-cd]pyrene	490		86	31	ug/Kg	₩	02/21/13 12:14	02/22/13 15:03	4
-Methylnaphthalene	150	J	170	19	ug/Kg	₩	02/21/13 12:14	02/22/13 15:03	4
2-Methylnaphthalene	160	J	170	31	ug/Kg	₽	02/21/13 12:14	02/22/13 15:03	4
Naphthalene	150	J	170	19	ug/Kg	\$	02/21/13 12:14	02/22/13 15:03	4
Phenanthrene	700		34	17	ug/Kg	₩	02/21/13 12:14	02/22/13 15:03	4
Pyrene	1300	P	86	16	ug/Kg	₽	02/21/13 12:14	02/22/13 15:03	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	82		30 - 130				02/21/13 12:14	02/22/13 15:03	

Lab Sample ID: 680-87545-2 Date Collected: 02/14/13 08:58 Percent Solids: 92.8 Date Received: 02/16/13 09:03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	430	U	430	86	ug/Kg	<u> </u>	02/21/13 09:55	02/22/13 20:42	4
Acenaphthylene	57	J	170	22	ug/Kg	≎	02/21/13 09:55	02/22/13 20:42	4
Anthracene	130		36	18	ug/Kg	₩	02/21/13 09:55	02/22/13 20:42	4
Benzo[a]anthracene	560		34	17	ug/Kg	\$	02/21/13 09:55	02/22/13 20:42	4
Benzo[a]pyrene	380		45	22	ug/Kg	≎	02/21/13 09:55	02/22/13 20:42	4
Benzo[b]fluoranthene	620		53	26	ug/Kg	₩	02/21/13 09:55	02/22/13 20:42	4
Benzo[g,h,i]perylene	350		86	19	ug/Kg	₽	02/21/13 09:55	02/22/13 20:42	4
Benzo[k]fluoranthene	210		34	16	ug/Kg	≎	02/21/13 09:55	02/22/13 20:42	4
Chrysene	570		39	19	ug/Kg	₩	02/21/13 09:55	02/22/13 20:42	4
Dibenz(a,h)anthracene	130		86	18	ug/Kg	₽	02/21/13 09:55	02/22/13 20:42	4
Fluoranthene	820		86	17	ug/Kg	₩	02/21/13 09:55	02/22/13 20:42	4
Fluorene	37	J	86	18	ug/Kg	≎	02/21/13 09:55	02/22/13 20:42	4
ndeno[1,2,3-cd]pyrene	330		86	31	ug/Kg	₽	02/21/13 09:55	02/22/13 20:42	4
1-Methylnaphthalene	120	J	170	19	ug/Kg	≎	02/21/13 09:55	02/22/13 20:42	4
2-Methylnaphthalene	120	∤ J	170	31	ug/Kg	₽	02/21/13 09:55	02/22/13 20:42	4
Naphthalene	98		170	19	ug/Kg	₽	02/21/13 09:55	02/22/13 20:42	4
Phenanthrene	570		34	17	ug/Kg	₽	02/21/13 09:55	02/22/13 20:42	4
Pyrene	770		86	16	ug/Kg	₩	02/21/13 09:55	02/22/13 20:42	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	44		30 - 130				02/21/13 09:55	02/22/13 20:42	4

TestAmerica Savannah

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SDG: 68087545-1

Client Sample ID: FM0161E-CS

Project/Site: 35th Avenue Superfund Site

Client: Oneida Total Integrated Enterprises LLC

Date Collected: 02/14/13 08:39 Date Received: 02/16/13 09:03

Lab Sample ID: 680-87545-3

Matrix: Solid

Percent Solids: 80.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	25	ug/Kg	-	02/21/13 09:55	02/22/13 20:57	1
Acenaphthylene	19	J	49	6.2	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Anthracene	32		10	5.2	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Benzo[a]anthracene	120		9.9	4.8	ug/Kg	\$	02/21/13 09:55	02/22/13 20:57	1
Benzo[a]pyrene	96		13	6.4	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Benzo[b]fluoranthene	140		15	7.5	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Benzo[g,h,i]perylene	78		25	5.4	ug/Kg	\$	02/21/13 09:55	02/22/13 20:57	1
Benzo[k]fluoranthene	63		9.9	4.4	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Chrysene	150		11	5.5	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Dibenz(a,h)anthracene	26		25	5.0	ug/Kg	\$	02/21/13 09:55	02/22/13 20:57	1
Fluoranthene	150		25	4.9	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Fluorene	11	J	25	5.0	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Indeno[1,2,3-cd]pyrene	67		25	8.7	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
1-Methylnaphthalene	43	J	49	5.4	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
2-Methylnaphthalene	56	J	49	8.7	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Naphthalene	46	J	49	5.4	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Phenanthrene	120		9.9	4.8	ug/Kg	₽	02/21/13 09:55	02/22/13 20:57	1
Pyrene	140		25	4.6	ug/Kg	\$	02/21/13 09:55	02/22/13 20:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68		30 - 130				02/21/13 09:55	02/22/13 20:57	1

Client Sample ID: FM0161F-CS

Date Collected: 02/14/13 08:47 Date Received: 02/16/13 09:03

o-Terphenyl

Lab Sample ID: 680-87545-4

Matrix: Solid

Percent Solids: 99.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	99	U	99	20	ug/Kg	\	02/21/13 09:55	02/22/13 21:12	1
Acenaphthylene	17	J	40	5.0	ug/Kg	₽	02/21/13 09:55	02/22/13 21:12	1
Anthracene	45		8.3	4.2	ug/Kg	₩	02/21/13 09:55	02/22/13 21:12	1
Benzo[a]anthracene	190		7.9	3.9	ug/Kg	₽	02/21/13 09:55	02/22/13 21:12	1
Benzo[a]pyrene	130		10	5.2	ug/Kg	≎	02/21/13 09:55	02/22/13 21:12	1
Benzo[b]fluoranthene	210		12	6.1	ug/Kg	₩	02/21/13 09:55	02/22/13 21:12	1
Benzo[g,h,i]perylene	97		20	4.4	ug/Kg	*	02/21/13 09:55	02/22/13 21:12	1
Benzo[k]fluoranthene	66		7.9	3.6	ug/Kg	₩	02/21/13 09:55	02/22/13 21:12	1
Chrysene	180		8.9	4.5	ug/Kg	₩	02/21/13 09:55	02/22/13 21:12	1
Dibenz(a,h)anthracene	36		20	4.1	ug/Kg	₽	02/21/13 09:55	02/22/13 21:12	1
Fluoranthene	300		20	4.0	ug/Kg	₩	02/21/13 09:55	02/22/13 21:12	1
Fluorene	15	J	20	4.1	ug/Kg	₩	02/21/13 09:55	02/22/13 21:12	1
Indeno[1,2,3-cd]pyrene	100		20	7.1	ug/Kg	₽	02/21/13 09:55	02/22/13 21:12	1
1-Methylnaphthalene	27	J	40	4.4	ug/Kg	≎	02/21/13 09:55	02/22/13 21:12	1
2-Methylnaphthalene	36	JJ	40	7.1	ug/Kg	≎	02/21/13 09:55	02/22/13 21:12	1
Naphthalene	42		40	4.4	ug/Kg	\$	02/21/13 09:55	02/22/13 21:12	1
Phenanthrene	200		7.9	3.9	ug/Kg	₽	02/21/13 09:55	02/22/13 21:12	1
Pyrene	260		20	3.7	ug/Kg	\$	02/21/13 09:55	02/22/13 21:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

TestAmerica Savannah

02/22/13 21:12

02/21/13 09:55

30 - 130

58

Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIF October 2012)

SDG: 68087545-1

Client Sample ID: FM0161G-CS

Project/Site: 35th Avenue Superfund Site

Client: Oneida Total Integrated Enterprises LLC

Date Collected: 02/14/13 08:58 Date Received: 02/16/13 09:03

Lab Sample ID: 680-87545-5

Matrix: Solid

Percent Solids: 96.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	<u> </u>	02/21/13 09:55	02/22/13 21:27	
Acenaphthylene	15	J	40	5.0	ug/Kg	≎	02/21/13 09:55	02/22/13 21:27	
Anthracene	24		8.5	4.2	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	•
Benzo[a]anthracene	130		8.1	3.9	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Benzo[a]pyrene	94		10	5.2	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Benzo[b]fluoranthene	140		12	6.2	ug/Kg	₩	02/21/13 09:55	02/22/13 21:27	
Benzo[g,h,i]perylene	65		20	4.4	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Benzo[k]fluoranthene	54		8.1	3.6	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Chrysene	140		9.1	4.5	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Dibenz(a,h)anthracene	27		20	4.1	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Fluoranthene	150		20	4.0	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Fluorene	5.8	J	20	4.1	ug/Kg	₩	02/21/13 09:55	02/22/13 21:27	
ndeno[1,2,3-cd]pyrene	60		20	7.2	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
1-Methylnaphthalene	28	J	40	4.4	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
2-Methylnaphthalene	37	J	40	7.2	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Naphthalene	43		40	4.4	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Phenanthrene	69		8.1	3.9	ug/Kg	₽	02/21/13 09:55	02/22/13 21:27	
Pyrene	140		20	3.7	ug/Kg	₩	02/21/13 09:55	02/22/13 21:27	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
p-Terphenyl	51		30 - 130				02/21/13 09:55	02/22/13 21:27	

Date Collected: 02/14/13 09:05 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Percent Solids: 97.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	*	02/21/13 09:55	02/22/13 21:43	1
Acenaphthylene	10	J	41	5.2	ug/Kg	₩	02/21/13 09:55	02/22/13 21:43	1
Anthracene	18	J	8.7	4.3	ug/Kg	₩	02/21/13 09:55	02/22/13 21:43	1
Benzo[a]anthracene	61	J	8.3	4.0	ug/Kg	₽	02/21/13 09:55	02/22/13 21:43	1
Benzo[a]pyrene	40	J	11	5.4	ug/Kg	₩	02/21/13 09:55	02/22/13 21:43	1
Benzo[b]fluoranthene	68	J	13	6.3	ug/Kg	₩	02/21/13 09:55	02/22/13 21:43	1
Benzo[g,h,i]perylene	36	J	21	4.5	ug/Kg	*	02/21/13 09:55	02/22/13 21:43	1
Benzo[k]fluoranthene	23	J	8.3	3.7	ug/Kg	₩	02/21/13 09:55	02/22/13 21:43	1
Chrysene	70	J	9.3	4.7	ug/Kg	₩	02/21/13 09:55	02/22/13 21:43	1
Dibenz(a,h)anthracene	15	J	21	4.2	ug/Kg	*	02/21/13 09:55	02/22/13 21:43	1
Fluoranthene	67	J	21	4.1	ug/Kg	₩	02/21/13 09:55	02/22/13 21:43	1
Fluorene	21	U	21	4.2	ug/Kg	₩	02/21/13 09:55	02/22/13 21:43	1
ndeno[1,2,3-cd]pyrene	29	J	21	7.3	ug/Kg	₽	02/21/13 09:55	02/22/13 21:43	1
I-Methylnaphthalene	15	J	41	4.5	ug/Kg	₽	02/21/13 09:55	02/22/13 21:43	1
2-Methylnaphthalene	21	JJ	41	7.3	ug/Kg	₽	02/21/13 09:55	02/22/13 21:43	1
Naphthalene	23	J	41	4.5	ug/Kg	*	02/21/13 09:55	02/22/13 21:43	1
Phenanthrene	45	J	8.3	4.0	ug/Kg	₽	02/21/13 09:55	02/22/13 21:43	1
Pyrene	66	J	21	3.8	ug/Kg	₩	02/21/13 09:55	02/22/13 21:43	1

TestAmerica Savannah

Analyzed

02/22/13 21:43

Prepared

02/21/13 09:55

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Limits

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%Recovery Qualifier

40

3/1/2013

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Lab Sample ID: 680-87545-7

Matrix: Solid Percent Solids: 71.7

Client Sample ID: FM0161H-CSD

Date Collected: 02/14/13 09:08 Date Received: 02/16/13 09:03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	28	ug/Kg	₩	02/21/13 09:55	02/22/13 21:58	1
Acenaphthylene	34	J	56	7.0	ug/Kg	₩	02/21/13 09:55	02/22/13 21:58	1
Anthracene	86	J	12	5.9	ug/Kg	₩	02/21/13 09:55	02/22/13 21:58	1
Benzo[a]anthracene	220	J	11	5.4	ug/Kg	\$	02/21/13 09:55	02/22/13 21:58	1
Benzo[a]pyrene	140	J	14	7.2	ug/Kg	₩	02/21/13 09:55	02/22/13 21:58	1
Benzo[b]fluoranthene	210	J	17	8.5	ug/Kg	₩	02/21/13 09:55	02/22/13 21:58	1
Benzo[g,h,i]perylene	94	J	28	6.1	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
Benzo[k]fluoranthene	99	J	11	5.0	ug/Kg	₩	02/21/13 09:55	02/22/13 21:58	1
Chrysene	230	J	13	6.3	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
Dibenz(a,h)anthracene	43		28	5.7	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
Fluoranthene	340	J	28	5.6	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
Fluorene	27	J	28	5.7	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
Indeno[1,2,3-cd]pyrene	100	J	28	9.9	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
1-Methylnaphthalene	40	J	56	6.1	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
2-Methylnaphthalene	55	J	56	9.9	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
Naphthalene	62		56	6.1	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
Phenanthrene	310	J	11	5.4	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1 1
Pyrene	270	J	28	5.2	ug/Kg	₽	02/21/13 09:55	02/22/13 21:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	52		30 - 130				02/21/13 09:55	02/22/13 21:58	1

Client Sample ID: FM0161I-CS

Date Collected: 02/14/13 09:10 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Lab Sample ID: 680-87545-8

Matrix: Solid Percent Solids: 98.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	<u> </u>	02/21/13 09:55	02/22/13 22:13	1
Acenaphthylene	7.4	J	41	5.1	ug/Kg	₩	02/21/13 09:55	02/22/13 22:13	1
Anthracene	12		8.6	4.3	ug/Kg	₩	02/21/13 09:55	02/22/13 22:13	1
Benzo[a]anthracene	42		8.2	4.0	ug/Kg	*	02/21/13 09:55	02/22/13 22:13	1
Benzo[a]pyrene	32		11	5.3	ug/Kg	₩	02/21/13 09:55	02/22/13 22:13	1
Benzo[b]fluoranthene	50		12	6.2	ug/Kg	₩	02/21/13 09:55	02/22/13 22:13	1
Benzo[g,h,i]perylene	31		20	4.5	ug/Kg	*	02/21/13 09:55	02/22/13 22:13	1
Benzo[k]fluoranthene	19		8.2	3.7	ug/Kg	₩	02/21/13 09:55	02/22/13 22:13	1
Chrysene	56		9.2	4.6	ug/Kg	₩	02/21/13 09:55	02/22/13 22:13	1
Dibenz(a,h)anthracene	12	J	20	4.2	ug/Kg	₽	02/21/13 09:55	02/22/13 22:13	1
Fluoranthene	44		20	4.1	ug/Kg	₩	02/21/13 09:55	02/22/13 22:13	1
Fluorene	5.0	J	20	4.2	ug/Kg	₩	02/21/13 09:55	02/22/13 22:13	1
ndeno[1,2,3-cd]pyrene	28		20	7.3	ug/Kg	₽	02/21/13 09:55	02/22/13 22:13	1
-Methylnaphthalene	19	J	41	4.5	ug/Kg	₽	02/21/13 09:55	02/22/13 22:13	1
-Methylnaphthalene	24	J	41	7.3	ug/Kg	₽	02/21/13 09:55	02/22/13 22:13	1
laphthalene	27	J	41	4.5	ug/Kg	₽	02/21/13 09:55	02/22/13 22:13	1
Phenanthrene	42		8.2	4.0	ug/Kg	₽	02/21/13 09:55	02/22/13 22:13	1
Pyrene	43		20	3.8	ug/Kg	₽	02/21/13 09:55	02/22/13 22:13	

TestAmerica Savannah

Analyzed

02/22/13 22:13

Prepared

02/21/13 09:55

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Limits

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%Recovery Qualifier

48

Dil Fac

Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIF October 2012)

3/1/2013

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Lab Sample ID: 680-87545-9

Matrix: Solid

Percent Solids: 93.3

Client Sample ID: FM0161AD-GS

Date Collected: 02/14/13 08:49 Date Received: 02/16/13 09:03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	21	ug/Kg	<u> </u>	02/21/13 09:55	02/22/13 22:28	1
Acenaphthylene	28	J	43	5.4	ug/Kg	₽	02/21/13 09:55	02/22/13 22:28	1
Anthracene	39		9.0	4.5	ug/Kg	₽	02/21/13 09:55	02/22/13 22:28	1
Benzo[a]anthracene	100		8.6	4.2	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
Benzo[a]pyrene	77		11	5.6	ug/Kg	≎	02/21/13 09:55	02/22/13 22:28	1
Benzo[b]fluoranthene	120		13	6.5	ug/Kg	≎	02/21/13 09:55	02/22/13 22:28	1
Benzo[g,h,i]perylene	50		21	4.7	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
Benzo[k]fluoranthene	39		8.6	3.9	ug/Kg	≎	02/21/13 09:55	02/22/13 22:28	1
Chrysene	110		9.6	4.8	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
Dibenz(a,h)anthracene	23		21	4.4	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
Fluoranthene	120		21	4.3	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
Fluorene	5.7	J	21	4.4	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
Indeno[1,2,3-cd]pyrene	55		21	7.6	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
1-Methylnaphthalene	25	J	43	4.7	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
2-Methylnaphthalene	35	⊁ J	43	7.6	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
Naphthalene	39	J	43	4.7	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
Phenanthrene	64		8.6	4.2	ug/Kg	₩	02/21/13 09:55	02/22/13 22:28	1
Pyrene	110		21	4.0	ug/Kg	₽	02/21/13 09:55	02/22/13 22:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66		30 - 130				02/21/13 09:55	02/22/13 22:28	

Client Sample ID: FM0161AE-GS

Date Collected: 02/14/13 08:52 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIF October 2012) Lab Sample ID: 680-87545-10

Matrix: Solid Percent Solids: 91.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	22	ug/Kg	\	02/21/13 12:14	02/22/13 15:58	1
Acenaphthylene	10	J	44	5.5	ug/Kg	₩	02/21/13 12:14	02/22/13 15:58	1
Anthracene	17		9.2	4.6	ug/Kg	₩	02/21/13 12:14	02/22/13 15:58	1
Benzo[a]anthracene	130		8.7	4.3	ug/Kg	₽	02/21/13 12:14	02/22/13 15:58	1
Benzo[a]pyrene	110	J	11	5.7	ug/Kg	₽	02/21/13 12:14	02/22/13 15:58	1
Benzo[b]fluoranthene	170		13	6.7	ug/Kg	₩	02/21/13 12:14	02/22/13 15:58	1
Benzo[g,h,i]perylene	65		22	4.8	ug/Kg	₽	02/21/13 12:14	02/22/13 15:58	1
Benzo[k]fluoranthene	83		8.7	3.9	ug/Kg	₽	02/21/13 12:14	02/22/13 15:58	1
Chrysene	140	J	9.8	4.9	ug/Kg	₩	02/21/13 12:14	02/22/13 15:58	1
Dibenz(a,h)anthracene	23		22	4.5	ug/Kg	₽	02/21/13 12:14	02/22/13 15:58	1
Fluoranthene	250		22	4.4	ug/Kg	₩	02/21/13 12:14	02/22/13 15:58	1
Fluorene	6.7	J	22	4.5	ug/Kg	₩	02/21/13 12:14	02/22/13 15:58	1
Indeno[1,2,3-cd]pyrene	67		22	7.8	ug/Kg	₽	02/21/13 12:14	02/22/13 15:58	1
1-Methylnaphthalene	31	J	44	4.8	ug/Kg	₽	02/21/13 12:14	02/22/13 15:58	1
2-Methylnaphthalene	42	J	44	7.8	ug/Kg	₩	02/21/13 12:14	02/22/13 15:58	1
Naphthalene	39	J	44	4.8	ug/Kg	₽	02/21/13 12:14	02/22/13 15:58	1
Phenanthrene	120		8.7	4.3	ug/Kg	₽	02/21/13 12:14	02/22/13 15:58	1
Pyrene	200		22	4.0	ug/Kg	₩	02/21/13 12:14	02/22/13 15:58	1

TestAmerica Savannah

Analyzed

02/22/13 15:58

Prepared

02/21/13 12:14

Limits

30 - 130

%Recovery Qualifier

101

SDG: 68087545-1

Client Sample ID: FM0161AF-GS

Project/Site: 35th Avenue Superfund Site

Client: Oneida Total Integrated Enterprises LLC

Date Collected: 02/14/13 08:58 Date Received: 02/16/13 09:03

Lab Sample ID: 680-87545-11

Matrix: Solid Percent Solids: 95.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	\	02/21/13 12:14	02/22/13 16:16	1
Acenaphthylene	7.7	J	42	5.2	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Anthracene	9.3		8.8	4.4	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Benzo[a]anthracene	69		8.4	4.1	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Benzo[a]pyrene	59	J	11	5.5	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Benzo[b]fluoranthene	100		13	6.4	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Benzo[g,h,i]perylene	46		21	4.6	ug/Kg	\$	02/21/13 12:14	02/22/13 16:16	1
Benzo[k]fluoranthene	41		8.4	3.8	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Chrysene	70	J	9.4	4.7	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Dibenz(a,h)anthracene	14	J	21	4.3	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Fluoranthene	94		21	4.2	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Fluorene	5.9	J	21	4.3	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Indeno[1,2,3-cd]pyrene	39		21	7.5	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
1-Methylnaphthalene	19	J	42	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
2-Methylnaphthalene	20	J	42	7.5	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Naphthalene	29	J	42	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Phenanthrene	54		8.4	4.1	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Pyrene	81		21	3.9	ug/Kg	₽	02/21/13 12:14	02/22/13 16:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	89		30 - 130				02/21/13 12:14	02/22/13 16:16	1

Client Sample ID: FM0161AG-GS

Date Collected: 02/14/13 09:41 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Lab Sample ID: 680-87545-12

Matrix: Solid Percent Solids: 99.0 g

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	23	J	100	20	ug/Kg	*	02/21/13 12:14	02/22/13 16:34	-
Acenaphthylene	7.0	J	41	5.1	ug/Kg	₩	02/21/13 12:14	02/22/13 16:34	
Anthracene	19		8.5	4.3	ug/Kg	₩	02/21/13 12:14	02/22/13 16:34	
Benzo[a]anthracene	140		8.1	4.0	ug/Kg	₽	02/21/13 12:14	02/22/13 16:34	
Benzo[a]pyrene	110	J	11	5.3	ug/Kg	₽	02/21/13 12:14	02/22/13 16:34	•
Benzo[b]fluoranthene	200		12	6.2	ug/Kg	₩	02/21/13 12:14	02/22/13 16:34	
Benzo[g,h,i]perylene	77		20	4.5	ug/Kg	₽	02/21/13 12:14	02/22/13 16:34	
Benzo[k]fluoranthene	74		8.1	3.7	ug/Kg	₩	02/21/13 12:14	02/22/13 16:34	
Chrysene	140	J	9.1	4.6	ug/Kg	₩	02/21/13 12:14	02/22/13 16:34	
Dibenz(a,h)anthracene	28		20	4.2	ug/Kg	₽	02/21/13 12:14	02/22/13 16:34	
Fluoranthene	330		20	4.1	ug/Kg	₩	02/21/13 12:14	02/22/13 16:34	
Fluorene	19	J	20	4.2	ug/Kg	₽	02/21/13 12:14	02/22/13 16:34	•
Indeno[1,2,3-cd]pyrene	74		20	7.2	ug/Kg	₽	02/21/13 12:14	02/22/13 16:34	
1-Methylnaphthalene	42		41	4.5	ug/Kg	₽	02/21/13 12:14	02/22/13 16:34	•
2-Methylnaphthalene	52		41	7.2	ug/Kg	₽	02/21/13 12:14	02/22/13 16:34	•
Naphthalene	57		41	4.5	ug/Kg	\$	02/21/13 12:14	02/22/13 16:34	
Phenanthrene	250		8.1	4.0	ug/Kg	₩	02/21/13 12:14	02/22/13 16:34	•
Pyrene	240		20	3.8	ug/Kg	₽	02/21/13 12:14	02/22/13 16:34	

TestAmerica Savannah

Analyzed

02/22/13 16:34

Prepared

02/21/13 12:14

Page 11 of 31

Limits

30 - 130

%Recovery Qualifier

73

Dil Fac

Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTTF. October 2012)

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Lab Sample ID: 680-87545-13

Client Sample ID: FM0161AH-GS

Date Collected: 02/14/13 09:43 Date Received: 02/16/13 09:03

Matrix: Solid Percent Solids: 94.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	₩	02/21/13 12:14	02/22/13 16:53	1
Acenaphthylene	20	J	42	5.2	ug/Kg	₩	02/21/13 12:14	02/22/13 16:53	1
Anthracene	17		8.8	4.4	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	•
Benzo[a]anthracene	92		8.4	4.1	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Benzo[a]pyrene	98	J	11	5.5	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Benzo[b]fluoranthene	180		13	6.4	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Benzo[g,h,i]perylene	65		21	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Benzo[k]fluoranthene	75		8.4	3.8	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Chrysene	130	J	9.4	4.7	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Dibenz(a,h)anthracene	21		21	4.3	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Fluoranthene	110		21	4.2	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Fluorene	9.4	J	21	4.3	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
ndeno[1,2,3-cd]pyrene	68		21	7.5	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
1-Methylnaphthalene	42		42	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
2-Methylnaphthalene	46		42	7.5	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Naphthalene	57		42	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Phenanthrene	69		8.4	4.1	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Pyrene	110		21	3.9	ug/Kg	₽	02/21/13 12:14	02/22/13 16:53	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	85		30 - 130				02/21/13 12:14	02/22/13 16:53	

Date Collected: 02/14/13 09:52 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Percent Solids: 45.1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	220	U	220	44	ug/Kg	₩	02/21/13 12:14	02/22/13 17:11	1
Acenaphthylene	87	U	87	11	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	1
Anthracene	18	U	18	9.2	ug/Kg	₩	02/21/13 12:14	02/22/13 17:11	1
Benzo[a]anthracene	47		17	8.5	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	1
Benzo[a]pyrene	23	J	23	11	ug/Kg	₩	02/21/13 12:14	02/22/13 17:11	1
Benzo[b]fluoranthene	32		27	13	ug/Kg	₩	02/21/13 12:14	02/22/13 17:11	1
Benzo[g,h,i]perylene	18	J	44	9.6	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	1
Benzo[k]fluoranthene	18		17	7.8	ug/Kg	₩	02/21/13 12:14	02/22/13 17:11	1
Chrysene	26	J	20	9.8	ug/Kg	₩	02/21/13 12:14	02/22/13 17:11	1
Dibenz(a,h)anthracene	44	U	44	8.9	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	1
Fluoranthene	65		44	8.7	ug/Kg	₩	02/21/13 12:14	02/22/13 17:11	1
Fluorene	18	J	44	8.9	ug/Kg	₩	02/21/13 12:14	02/22/13 17:11	1
Indeno[1,2,3-cd]pyrene	44	U	44	15	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	1
1-Methylnaphthalene	50	J	87	9.6	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	1
2-Methylnaphthalene	59	J	87	15	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	1
Naphthalene	92		87	9.6	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	1
Phenanthrene	68		17	8.5	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	1
Pyrene	39	J	44	8.1	ug/Kg	₽	02/21/13 12:14	02/22/13 17:11	4

TestAmerica Savannah

Analyzed

02/22/13 17:11

Prepared

02/21/13 12:14

Limits

30 - 130

%Recovery Qualifier

82

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Lab Sample ID: 680-87545-15

Matrix: Solid

Percent Solids: 98.4

Client Sample ID: FM0161AJ-GS

Date Collected: 02/14/13 10:04 Date Received: 02/16/13 09:03

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	99	U	99	20	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Acenaphthylene	7.0	J	40	4.9	ug/Kg	₽	02/21/13 12:14	02/22/13 17:29	1
Anthracene	18		8.3	4.2	ug/Kg	₽	02/21/13 12:14	02/22/13 17:29	1
Benzo[a]anthracene	94		7.9	3.9	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Benzo[a]pyrene	76	J	10	5.1	ug/Kg	≎	02/21/13 12:14	02/22/13 17:29	1
Benzo[b]fluoranthene	130		12	6.0	ug/Kg	≎	02/21/13 12:14	02/22/13 17:29	1
Benzo[g,h,i]perylene	53		20	4.4	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Benzo[k]fluoranthene	53		7.9	3.6	ug/Kg	≎	02/21/13 12:14	02/22/13 17:29	1
Chrysene	110	J	8.9	4.5	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Dibenz(a,h)anthracene	17	J	20	4.1	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Fluoranthene	160		20	4.0	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Fluorene	9.9	J	20	4.1	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Indeno[1,2,3-cd]pyrene	54		20	7.0	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
1-Methylnaphthalene	47		40	4.4	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
2-Methylnaphthalene	63		40	7.0	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Naphthalene	70		40	4.4	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Phenanthrene	110		7.9	3.9	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Pyrene	150		20	3.7	ug/Kg	₩	02/21/13 12:14	02/22/13 17:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	84		30 - 130				02/21/13 12:14	02/22/13 17:29	

Client Sample ID: FM0161AK-GS

Date Collected: 02/14/13 10:37 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Lab Sample ID: 680-87545-16

Matrix: Solid Percent Solids: 99.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	\$	02/21/13 12:14	02/22/13 17:48	1
Acenaphthylene	6.1	J	40	5.0	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
Anthracene	7.9	J	8.4	4.2	ug/Kg	₩	02/21/13 12:14	02/22/13 17:48	1
Benzo[a]anthracene	47		8.0	3.9	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
Benzo[a]pyrene	43	J	10	5.2	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
Benzo[b]fluoranthene	61		12	6.1	ug/Kg	₩	02/21/13 12:14	02/22/13 17:48	1
Benzo[g,h,i]perylene	32		20	4.4	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
Benzo[k]fluoranthene	30		8.0	3.6	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
Chrysene	61	J	9.0	4.5	ug/Kg	₩	02/21/13 12:14	02/22/13 17:48	1
Dibenz(a,h)anthracene	8.8	J	20	4.1	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
Fluoranthene	77		20	4.0	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
Fluorene	8.4	J	20	4.1	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
ndeno[1,2,3-cd]pyrene	28		20	7.1	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
1-Methylnaphthalene	53		40	4.4	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
2-Methylnaphthalene	59		40	7.1	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
Naphthalene	76		40	4.4	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1
Phenanthrene	69		8.0	3.9	ug/Kg	₩	02/21/13 12:14	02/22/13 17:48	1
Pyrene	62		20	3.7	ug/Kg	₽	02/21/13 12:14	02/22/13 17:48	1

TestAmerica Savannah

Analyzed

02/22/13 17:48

Prepared

02/21/13 12:14

Limits

30 - 130

%Recovery Qualifier

83

Dil Fac

Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIF October 2012)

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

SDG: 68087545-1

Client Sample ID: FM0161AL-GS

Date Collected: 02/14/13 10:52 Date Received: 02/16/13 09:03

Lab Sample ID: 680-87545-17

Matrix: Solid Percent Solids: 89.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	23	ug/Kg	\	02/21/13 12:14	02/22/13 18:06	1
Acenaphthylene	18	J	45	5.6	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
Anthracene	27		9.5	4.7	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
Benzo[a]anthracene	99		9.0	4.4	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
Benzo[a]pyrene	86	J	12	5.9	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
Benzo[b]fluoranthene	220		14	6.9	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
Benzo[g,h,i]perylene	62		23	5.0	ug/Kg	\$	02/21/13 12:14	02/22/13 18:06	1
Benzo[k]fluoranthene	66		9.0	4.1	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
Chrysene	190	J	10	5.1	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
Dibenz(a,h)anthracene	18	J	23	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
Fluoranthene	170		23	4.5	ug/Kg	≎	02/21/13 12:14	02/22/13 18:06	1
Fluorene	20	J	23	4.6	ug/Kg	₩	02/21/13 12:14	02/22/13 18:06	1
Indeno[1,2,3-cd]pyrene	45		23	8.0	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
1-Methylnaphthalene	79		45	5.0	ug/Kg	≎	02/21/13 12:14	02/22/13 18:06	1
2-Methylnaphthalene	110		45	8.0	ug/Kg	≎	02/21/13 12:14	02/22/13 18:06	1
Naphthalene	140		45	5.0	ug/Kg	₽	02/21/13 12:14	02/22/13 18:06	1
Phenanthrene	150		9.0	4.4	ug/Kg	≎	02/21/13 12:14	02/22/13 18:06	1
Pyrene	170		23	4.2	ug/Kg	\$	02/21/13 12:14	02/22/13 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	85		30 - 130				02/21/13 12:14	02/22/13 18:06	1

Client Sample ID: FM0161AM-GS

Date Collected: 02/14/13 10:53 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIF October 2012) Lab Sample ID: 680-87545-18

Matrix: Solid Percent Solids: 82.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	<u> </u>	02/21/13 12:14	02/22/13 18:24	
Acenaphthylene	47	U	47	5.9	ug/Kg	₽	02/21/13 12:14	02/22/13 18:24	•
Anthracene	9.1	J	9.9	5.0	ug/Kg	₩	02/21/13 12:14	02/22/13 18:24	
Benzo[a]anthracene	27		9.5	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 18:24	
Benzo[a]pyrene	16	J	12	6.1	ug/Kg	₩	02/21/13 12:14	02/22/13 18:24	
Benzo[b]fluoranthene	33		14	7.2	ug/Kg	₩	02/21/13 12:14	02/22/13 18:24	
Benzo[g,h,i]perylene	13	J	24	5.2	ug/Kg	₽	02/21/13 12:14	02/22/13 18:24	
Benzo[k]fluoranthene	8.4	J	9.5	4.3	ug/Kg	₩	02/21/13 12:14	02/22/13 18:24	
Chrysene	28	J	11	5.3	ug/Kg	₩	02/21/13 12:14	02/22/13 18:24	•
Dibenz(a,h)anthracene	5.6	J	24	4.8	ug/Kg	₽	02/21/13 12:14	02/22/13 18:24	
Fluoranthene	38		24	4.7	ug/Kg	₩	02/21/13 12:14	02/22/13 18:24	
Fluorene	7.0	J	24	4.8	ug/Kg	₩	02/21/13 12:14	02/22/13 18:24	
Indeno[1,2,3-cd]pyrene	14	J	24	8.4	ug/Kg	₽	02/21/13 12:14	02/22/13 18:24	
1-Methylnaphthalene	25	J	47	5.2	ug/Kg	₽	02/21/13 12:14	02/22/13 18:24	
2-Methylnaphthalene	26	J	47	8.4	ug/Kg	₽	02/21/13 12:14	02/22/13 18:24	•
Naphthalene	34	J	47	5.2	ug/Kg	₽	02/21/13 12:14	02/22/13 18:24	
Phenanthrene	47		9.5	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 18:24	•
Pyrene	34		24	4.4	ug/Kg	⇔	02/21/13 12:14	02/22/13 18:24	

TestAmerica Savannah

Analyzed

02/22/13 18:24

Prepared

02/21/13 12:14

Limits

30 - 130

%Recovery Qualifier

81

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87545-1

SDG: 68087545-1

Client Sample ID: FM0161J-CS

Date Collected: 02/14/13 09:31 Date Received: 02/16/13 09:03 Lab Sample ID: 680-87545-19 Matrix: Solid

Percent Solids: 96.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	<u></u>	02/21/13 12:14	02/22/13 18:43	1
Acenaphthylene	7.1	J	41	5.1	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Anthracene	10		8.5	4.3	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Benzo[a]anthracene	55		8.1	4.0	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Benzo[a]pyrene	46	J	11	5.3	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Benzo[b]fluoranthene	87		12	6.2	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Benzo[g,h,i]perylene	33		20	4.5	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Benzo[k]fluoranthene	26		8.1	3.7	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Chrysene	66	J	9.1	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Dibenz(a,h)anthracene	11	J	20	4.2	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Fluoranthene	83		20	4.1	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Fluorene	9.1	J	20	4.2	ug/Kg	₩	02/21/13 12:14	02/22/13 18:43	1
Indeno[1,2,3-cd]pyrene	29		20	7.2	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
1-Methylnaphthalene	37	J	41	4.5	ug/Kg	₩	02/21/13 12:14	02/22/13 18:43	1
2-Methylnaphthalene	47		41	7.2	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Naphthalene	77		41	4.5	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Phenanthrene	71		8.1	4.0	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Pyrene	70		20	3.8	ug/Kg	₽	02/21/13 12:14	02/22/13 18:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	85		30 - 130				02/21/13 12:14	02/22/13 18:43	

Client Sample ID: FM0161K-CS

Date Collected: 02/14/13 09:37 Date Received: 02/16/13 09:03

Surrogate

o-Terphenyl

Lab Sample ID: 680-87545-20

Matrix: Solid Percent Solids: 96.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	*	02/21/13 12:14	02/22/13 19:01	
Acenaphthylene	8.2	J	41	5.2	ug/Kg	₩	02/21/13 12:14	02/22/13 19:01	•
Anthracene	10		8.7	4.4	ug/Kg	₩	02/21/13 12:14	02/22/13 19:01	•
Benzo[a]anthracene	70		8.3	4.0	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	· · · · · · · ·
Benzo[a]pyrene	62	J	11	5.4	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	•
Benzo[b]fluoranthene	110	_	13	6.3	ug/Kg	₩	02/21/13 12:14	02/22/13 19:01	•
Benzo[g,h,i]perylene	53		21	4.6	ug/Kg	\$	02/21/13 12:14	02/22/13 19:01	
Benzo[k]fluoranthene	48		8.3	3.7	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	•
Chrysene	79	J	9.3	4.7	ug/Kg	₩	02/21/13 12:14	02/22/13 19:01	•
Dibenz(a,h)anthracene	15	J	21	4.2	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	· · · · · · · · ·
Fluoranthene	100		21	4.1	ug/Kg	₩	02/21/13 12:14	02/22/13 19:01	•
Fluorene	9.1	J	21	4.2	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	•
Indeno[1,2,3-cd]pyrene	38		21	7.4	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	•
1-Methylnaphthalene	52		41	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	•
2-Methylnaphthalene	57		41	7.4	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	•
Naphthalene	75		41	4.6	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	· · · · · · · · ·
Phenanthrene	84		8.3	4.0	ug/Kg	₽	02/21/13 12:14	02/22/13 19:01	•
Pyrene	87		21	3.8	ug/Kg	₩	02/21/13 12:14	02/22/13 19:01	

TestAmerica Savannah

Analyzed

02/22/13 19:01

Prepared

02/21/13 12:14

Limits

30 - 130

%Recovery Qualifier

85

Dil Fac

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTHE October 2012)